Methods: Using random digit dialing survey on phone calls, persons > 40 yrs, with pain in the knee or the hip area were selected. Those who agreed were examined in one of the six French investigating centres (Amiens, Brest, Nancy, Nice, Paris, Toulouse), and their knees (AP extension view, Lyon schuss and sky view) and/or their hips (AP pelvis, Lequesne oblique view) were x-rayed. The structural changes of knee and hip OA (Kellgren-Lawrence [KL] ≥ 2) were recorded by centralised reading. Patients fulfilling the inclusion criteria where then proposed to enter the KHOALA cohort (Knee and Hip OsteoArthritis Long-term Assessment).
Results: During the first year of recruitment (April 2007 - March 2008), 1506 subjects (females: 71%; mean age: 58 yrs) had x-rays: 312 hips, 674 knees, 520 both leading to 832 hip and 1194 knee radiographs (table). For both hips and knees, OA was as often unilateral as bilateral (50/50). In 10% of the cases, a hip/knee prosthesis on one side made these patients classified as “bilateral”. In the presence of bilateral involvement, narrowing of the joint space was at the same location in both sides (96%). In hip OA the narrowing was supero-lateral (64%), supero-medial (22%), inferior/posterior (7%) and global (5%). In knee OA the narrowing was tibio-femoral medial (78%), lateral (11%) or both (7%). Patello-femoral OA was associated in 26% of the cases.

Table 1

	X-rays	X-rays of high quality	KL 0	KL 1	KL 2	KL 3	KL 4	KL ≥2
Hips	832	634	267	205	113	42	7	162
Knees	1194	801	198	316	123	95	69	287

Conclusions: Conclusion. (1) Hip and knee OA were observed in 19% and 24% of the cases respectively; (2) If only “high quality” radiographs were considered, the OA rates were 26 and 36% respectively; (3) most of the subjects had no medical care, did not known they had OA and logically the discovered OA was at an early stage. This was observed for hip, but not for knee where the rate of marked OA (KL≥3) was high, in accordance with the common idea that knee OA is more often non diagnosed than hip OA, because could be less symptomatic; (4) Knee OA was more frequent than hip OA in all the French centres excepted the one in Brittany where the proportion was inversed, raising the issue of more prevalent hip OA in this area.
This study confirms that symptomatic knee OA is more frequent than hip OA, that around 25% of the tibio-femoral knee OA are associated with patello-femoral OA. In general population, conversely to hip OA, knee OA is less symptomatic.

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THE “NOTCHED PATELLA” IN THE FRENCH KHOALA COHORT

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Purpose: First described by Wackenheim et al. [1] in 1972, the bony apposition on the anterior part of the patella gives a “ notched ” aspect on sky views. What are the prevalence and the geographical distribution of this enthesopathy? In which pathology is it described?
Methods: Using random digit dialing survey on phone calls, persons >40 yrs, with pain in the knee were selected. Those who agreed were examined in one of the six French investigating centres (Amiens, Brest, Nancy, Nice, Paris, Toulouse), and standard radiographs were performed (AP extension view, Lyon schuss and sky view) The structural changes of patello- and tibio-femoral knee OA (Kellgren-Lawrence [KL] ≥2) were recorded by centralised reading. Patients fulfilling the inclusion criteria where then proposed to enter the KHOALA cohort (Knee and Hip OsteoArthritis Long-term Assessment).
Results: During the first year of recruitment (April 2007 - March 2008), 1194 subjects (females: 69%; mean age: 58 yrs) had x-rays of their knees (table). Eight hundred and one of these radiographs were of sufficient quality to determine the KL grade.One hundred cases of notched patella were observed (16%). One set of radiographs (one patient) was not interpretable for OA staging(*). This involvement was virtually always bilateral (98%). The affected people were older (60 vs 56 yrs) and more often males (38% vs 31%) than non-affected persons. The rate of notched patella was independent from the tibio-femoral OA stage. The patello-femoral OA was observed in 16 out of the 130 patients with notched patella (22%), comparable to the rate noted in the whole population (26%). The prevalence of these notched patella varied according to the centres: Amiens (5%), Brest (6%), Nancy (23%), Nice (15%), Paris (4%), Toulouse (7%). Other bony appositions (at the tibial insertion of the anterior cruciate ligament, on the posterior condyles) were observed in these patients and not in the remaining of the population.

Table 1

	KL 0	KL 1	KL 2	KL 3	KL 4	KL ≥2
Knees (n=801)	198	316	123	95	69	287
“Notched patella” (n=129)	45	44	17	17	6	40*

Conclusions: More than 1/10 patients over 40 yrs of age, suffering knee pain, has notched patella (130/1194 = 11%). It is often related with other knee enthesopathies, especially diffuse skeletal hyperostosis (Forestier’ disease or DISH), that often affect the knee [2] and may present without spine involvement [3]. Indeed, in our study, the affected people were more aged and more often males, as in DISH. The geographic disparity is not explained, but the high prevalence in the East of France may explain why authors from Strasbourg published the first description of this entity.

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MEDICAL TREATMENT AND MEDICAL CONSUMPTION IN ADULTS WITH NONTRAUMATIC KNEE COMPLAINTS IN GENERAL PRACTICE

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Purpose: To assess the medical treatment of the general practitioner (GP) at baseline and medical consumption during 1-year follow-up in adult patients visiting the GP with nontraumatic knee complaints.
Methods: Patients (aged > 35 years) consulting for nontraumatic knee complaints in general practice were enrolled in the study. At baseline, knee complaints, knee function, and medical treatment were assessed. During 1-year follow-up, medical consumption was assessed with 3-monthly questionnaires. In addition, factors

associated with baseline referral to a physiotherapist or orthopedic surgeon, or for X-ray of the knee were determined.
Results: Of the 549 patients included in the study, 480 (87.4%) were available for follow-up. The study population consisted of 236 (49.2%) women, mean age 53.6 (sd 11.3) years, and mean BMI 27.1 (sd 4.2). At baseline, 193 (35.2%) patients were advised by the GP to avoid heavy loading of the knee, and 150 (27.3%) received a prescription for pain medication. Of all patients, 311 (56.6%) received a referral to either a physiotherapist or orthopedic surgeon, or for X-ray of the knee. During 1-year follow-up, 182 (37.9%) patients revisited the GP, 180 (37.5%) visited a physiotherapist, and 114 (23.8%) an orthopedic surgeon.
Patient characteristics associated with referral to a physiotherapist were female gender, younger age, and crepitus of active extension of the knee. Associated with a referral to an orthopedic surgeon were no paid employment, feeling of giving way, and pain on passive flexion of the knee. Referral for X-ray of the knee was associated with female gender, older age, and a bony swelling of the joint.
Conclusions: Medical treatment at baseline partly corresponds with recommendations given in the Guideline of the Dutch College of General Practitioners for nontraumatic knee complaints in adults. In this study group, medical consumption is relatively high during 1-year follow-up.

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CHECK COHORT: RELATIONSHIP BETWEEN COMORBIDITY AND CLINICAL STATUS IN EARLY OA

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Purpose: Osteoarthritis (OA) is the most common diagnosis made in older patients with knee or hip pain in primary care. The prevalence of many other disabling conditions rises with age, and some chronic conditions can be found together with OA. An important question is to whether comorbidity and the presence of specific diseases impair the clinical status of patients with early OA. CHECK (Cohort Hip and Cohort Knee) is a prospective multicentre 10- year follow-up study on the onset and progression of OA in participants with early complaints of hip or knee.
Objective: To describe the relationship between comorbidity (number and presence of specific diseases) and the clinical status of participants with early osteoarthritis.
Methods: In the Netherlands a prospective 10-year follow-up study was initiated by the Dutch Arthritis Association on participants with early OA related complaints of hip and/or knee: CHECK. Inclusion criteria were pain and/or stiffness of knee and/or hip, age 45- 65 years, and had never or not longer than 6 months ago visited the general practitioner for these symptoms for the first time. The WOMAC was utilized to measure pain, stiffness, and limitations in activities. Physical functioning and mental functioning were measured by SF-36, a generic measure of self-reported health related quality of life (HRQL). The presence of chronic disease was assessed with a standard consensus based list (self-reported health module of Statistics Netherlands), which consists of 24 diseases and disorders. Statistical analyses included linear regression analyses with 'pain' scale and 'physical functioning' scale of the WOMAC and SF-36 as dependent and 'comorbidity' as covariate.
Results: In CHECK 1002 participants were included, a mean age of 56 years, mean BMI of 26 kg/m^2 and 79% are female. 76% of participants with knee symptoms fulfilled the clinical ACR criteria for classification of OA and 24% participants with early hip OA fulfilled the clinical classification criteria of hip OA. Over 64% of the included participants had comorbidity: musculoskeletal disorders of neck, shoulder, wrist and back (47%), hypertension (20%) and chronic respiratory diseases (18%) being most prevalent. After controlling for age, gender, severity of OA and BMI, there was a significant association with, the number of comorbidities and (1) pain and (2) function subscale of WOMAC and (3) physical component summary scale of SF-36. This indicates that subjects with more comorbidities have more pain (beta 0,5; $p \geq 0,00$), limitation in activities (beta 2,2 ; $p \geq 0,00$) and a worse health related quality of life (beta -2,2 ; $p \geq 0,00$). After controlling for age, sex, BMI, severity of OA and comorbidity count, there was no association with respiratory diseases and the clinical status of the participants. On the contrary, participants with an additional disorder of the musculoskeletal system had more pain (beta= 0,8) more problems with physical functions (beta= 2,9) and a worse HRQL (beta = -2,9 ;all $p \geq 0,00$). Participants with hypertension had less pain (beta= -0,6; p=0,05) and a better score on the physical component scale of the HRQL (beta= 2,5; p=0,001).
Conclusions: Even in participants with complaints of early OA, the clinical status was worse when the participants also suffered from another morbidity. The presence of specific disease, like additional musculoskeletal disorder, also increases the pain, problems in physical function and decreases the HRQL.

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HAND OSTEOARTHRITIS HAS A POOR PROGNOSIS OVER THREE YEARS: FINDINGS FROM THE CLINICAL ASSESSMENT STUDY OF THE HAND (CAS-HA)

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Purpose: To describe outcomes in terms of pain and functional limitation at 3 year follow-up in a population of community dwelling adults aged 50 years and over with hand problems and a subgroup with clinical hand OA.
Methods: Consenting participants aged 50 years and over reporting hand problems in the previous 12 months in a survey questionnaire were invited for a clinical assessment in the North Staffordshire Osteoarthritis Project - Clinical Assessment Study of the Hand (CAS-HA). A standardised assessment of hand symptoms (eg pain), clinical features (eg nodes) and specific clinical tests (eg Phalens) was undertaken. Good interobserver reliability was established prior to the start of the study. Symptoms and features were used to classify participants with clinical hand OA (ACR clinical criteria). Self-reported hand pain, functional limitation and stiffness were measured using the AUStralian/CANadian Osteoarthritis Hand Index (AUSCAN) subscales Pain (0-20), Stiffness (0-4) and Functional limitation (0-36). Participants with inflammatory arthritis were excluded. At 3 years, a follow up survey was mailed to eligible participants which included all three sub-scales of the AUSCAN and a global assessment of change captured by a health transition question. Changes in AUSCAN scores (baseline - 3 years, where a negative score indicates deterioration) and global change were described for the total sample and for participants classified with hand OA.
Results: 623 community dwelling adults aged 50 years and over with hand pain and hand problems attended for the research assessment (mean age 64yrs; 62% Female). Of these 27 were excluded with inflammatory arthritis and 179 had hand OA. At 3 years 93 % completed the follow-up questionnaire. The overall mean (SD) change in AUSCAN scores in the total sample was -0.6 (3.8) for Pain, 0.0 (0.9) for Stiffness and -1.4 (5.4) for Functional